

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Peter FLOHR *et al.*

Art Unit: 3749

Application No.: **10/623,812**

Examiner: Gravini, Stephen Michael

Filing Date: 22 July 2003

Attorney Ref. No.: 003-068

For: BURNER AND PILOT BURNER

**Via EFS-Web**

**CORRECTED SUMMARY UNDER 37 C.F.R. § 41.37(c)(1)(v)**

**Mail Stop Appeal Brief - Patents**

Commissioner for Patents

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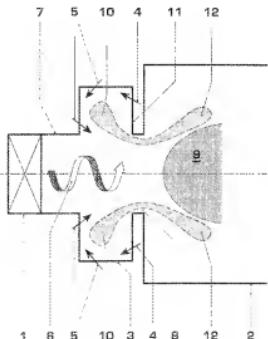
Sir:

In response to the Communication Re: Appeal dated 17 April 2007, Appellant submits this Corrected Summary in further compliance with 37 C.F.R. § 41.37(c)(1)(v). Appellant notes that the Communication did not set a period for response thereto under 37 C.F.R. § 41.37(d); nevertheless, Appellant files this paper within one month of the mailing date of the Communication, the time period established were a Notice of Non-compliant Brief issued, and therefore believes that this paper is timely filed. As confirmed to Appellant's undersigned representative during a telephone conference with Mr. Gravini on 9 April 2007, the Communication only requires correction of the Summary, and that none of the rules of Title 37, Code of Federal Regulations, uses the term "map" when describing the requirements for the Summary.

Favorable consideration is respectfully requested.

## SUMMARY OF CLAIMED SUBJECT MATTER

The present application describes burners [page 2, lines 28-31] as generally illustrated in the single drawing figure, reproduced herein to better assist in an appreciation of the present invention. A burner (unlabeled; see the drawing figure generally) includes a swirl generator 1 for a combustion air flow, a mixing section 7, and a combustion chamber 2 which is positioned downstream of the swirl generator 1 [page 5, lines 27-29]. Means for injecting fuel for producing a main flow 6 are provided generally in the area of the swirl generator 1 [page 5, lines 29-25]: "Fuel may be injected, for example, via fuel nozzles arranged in the conical hollow space or via lines arranged along the tangentially running ducts."; page 5, lines 29-33: "In the region of the swirl generator, fuel, via means which are not shown, is admixed with the air fed via a compressor (not shown), and thus produces a main flow 6, which enters the combustion chamber 2 via the tube 7."].



Exemplary burners which embody principles of the present invention include a cavity 3 arranged between the swirl generator 1 and the combustion chamber 2, which cavity 3 advantageously can be an annular toroidal cavity [page 6, lines 7-11]. The cavity 3 is arranged in such a way that a secondary flow 10 can be formed or produced therein, and this secondary flow 10 encloses the main flow 6 and stabilizes the inner backflow zone 9 with a secondary backflow zone 12 [page 6, lines 15-17; page 7, lines 4-15]. In such an exemplary burner, a main stream 6 of fuel and air flows from the swirl generator 1 via mixing section 7 into the combustion chamber 2 [page 5, lines 29-33; page 6, lines 15-17].

The cavity 3 advantageously can have an annular toroidal shape [page 6, lines 7-11].

The burner can include injection means for fuel and for combustion air arranged in the

cavity, exemplary embodiments of which include pilot-gas nozzles 4 and secondary-air nozzles 5 arranged over the circumference of the cavity 3 [page 6, lines 13-15].

The burner can include a mixing section including those portions of the tube 7 arranged between the swirl generator 1 and the cavity 3 and those arranged between the cavity 3 and the combustion chamber 2 [page 5, lines 27-29, 33-35].

The burner can create a secondary flow 12 configured and arranged to be used as a pilot flame [page 6, line 28 to page 7, line 15].

A pilot burner (unlabeled; see the drawing figure generally) includes a swirl generator 1 for a combustion air flow, a mixing section 7, and a combustion chamber 2 which is positioned downstream of the swirl generator 1 [page 5, lines 27-29]. Means for injecting fuel for producing a main flow 6 are provided generally in the area of the swirl generator 1 [page 5, lines 29-25: "Fuel may be injected, for example, via fuel nozzles arranged in the conical hollow space or via lines arranged along the tangentially running ducts."; page 5, lines 29-33: "In the region of the swirl generator, fuel, via means which are not shown, is admixed with the air fed via a compressor (not shown), and thus produces a main flow 6, which enters the combustion chamber 2 via the tube 7."].

Exemplary burners which embody principles of the present invention include a cavity 3 arranged between the swirl generator 1 and the combustion chamber 2 [page 6, lines 7-11]. The cavity 3 is arranged in such a way that a secondary flow 10 can be formed or produced therein, and this secondary flow 10 encloses the main flow 6 and stabilizes the inner backflow zone 9 with a secondary backflow zone 12 [page 6, lines 15-17; page 7, lines 4-15].

The cavity 3 of the pilot burner can have an annular toroidal shape [page 6, lines 7-11].

The burner can include injection means for fuel and for combustion air arranged in the cavity, exemplary embodiments of which include pilot-gas nozzles 4 and secondary-air nozzles 5 arranged over the circumference of the cavity 3 [page 6, lines 13-15].

Appellant has endeavored to fully respond to the Communication, despite the fact it (and the underlying Order signed by Mr. Nolan) failed to point out with particularity the alleged defects in the prior Summary. In the event that Mr. Gravini, Mr. Nolan, and/or any other personnel of the U.S. Patent and Trademark Office finds fault with this Summary or any other part of the Brief, they are requested to indicate on the record the specific material that is defective. Appellant respectfully submits that this Summary fully complies with 37 C.F.R. § 41.37(c)(1)(v), and therefore respectfully requests docketing of this appeal.

Respectfully submitted,

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Date: 16 May 2007